

Understanding TerraNova Score Changes when Transitioning to TerraNova, Third Edition

A White Paper Prepared By CTB/McGraw Hill



What kinds of score changes are expected when transitioning from previous TerraNova™ forms to the TerraNova, Third Edition? To address this question, one needs to consider how TerraNova 3 was scaled, the content of the form, the associated norms group, and the pattern of previous TerraNova form use.

TerraNova 3 scores were placed onto the TerraNova scale using a nationally-representative sample of students who took TerraNova 3 and an earlier TerraNova form. The scale scores from different TerraNova forms (including TerraNova 3) can be compared. In general, a student is expected to get about the same TerraNova scale score regardless of which form was taken. However, some caveats should be considered when comparing TerraNova 3 scores to scores from other TerraNova forms.

Although TerraNova 3 scores are on the same TerraNova score scale and can be compared to scale scores from other TerraNova forms, one should keep in mind that the content of TerraNova 3 is not strictly parallel to the content of the other TerraNova forms. The content of TerraNova 3 differs from the content of other TerraNova forms in that the TerraNova 3 Reading, Language and Mathematics tests assess higher depths of knowledge overall, and the Reading and Language items do not share the same theme anymore. In addition, the TerraNova 3 Language scale starts at level 13, and some previous language objectives have been folded into the TerraNova 3 Reading tests at levels 10-12. Because of these differences, TerraNova 3 scores should be considered comparable but not strictly interchangeable with scores from previous TerraNova forms. It is important to consider these content differences when evaluating changes in scores when moving from an earlier TerraNova form to TerraNova 3.

Because the forms are not parallel, the year-to-year comparability might be somewhat lower when using TerraNova 3 for the first time than it has been in previous years when the form remained the same or when the new form was strictly parallel to the old form. When a form with a more up-to-date content structure is introduced, student performance in that first year may shift slightly due, at least in part, to whether the new content structure is more or less aligned to the school's curriculum. This shift should only be seen in the first year of administration of the new test.

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TerraNova 3 scores reference the most current 2007 norms. Previous *TerraNova* norms were published in 1996, 2000, and 2005. A given scale score on any *TerraNova* form will be associated with different normative scores (e.g., percentile ranks, normal curve equivalents) depending on which norms group is referenced. To provide a sense of how the norm groups differ, Table 1 shows the 2007 national percentile that corresponds to the median national percentile from the 1996 norm group referenced by the *TerraNova* Forms A and B. Table 2 shows the 2007 national percentile that corresponds to the median national percentile from the 2000 and 2005 norm groups referenced by the *TerraNova, The Second Edition*. When comparing normative scores across years, it is important to consider which norms groups were used.

For example, in Reading, the scale score corresponding to a NP of 50 for grade 5 in 1996 corresponds to a NP of 48 in 2007. With 50% of the students scoring above this scale score in 1996 and 52% scoring above it in 2007 we can conclude that the students in 2007 performed better overall on the test.

Again, when interpreting these differences, one should take into account the content differences in the two *TerraNova* forms mentioned earlier.

Table 1: *TerraNova 3 NP 2007 NP for Students Who Scored at the 50th (Median) Percentile on TerraNova 1996 (Spring)*

TerraNova 3 2007 NP (Spring)								
Grade	TerraNova 1996 NP	Reading	Language	Mathematics	Reading Composite	Language Composite	Math Composite	Total
K	50	72	--	63	--	--	--	70
1	50	57	--	54	55	--	52	70
2	50	52	--	50	47	--	50	59
3	50	53	56	45	51	52	47	50
4	50	54	57	44	48	54	42	50
5	50	48	55	46	47	56	44	48
6	50	48	52	45	51	52	46	48
7	50	49	50	51	52	50	50	47
8	50	52	53	52	50	53	50	51
9	50	49	54	53	49	52	47	49
10	50	50	52	50	49	49	45	49
11	50	54	54	53	51	49	48	51
12	50	52	54	51	49	52	47	53

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Table 2: TerraNova 3 NP Expected for Students Who Scored at the 50th (Median) Percentile on TerraNova, The Second Edition 2000 and TerraNova, The Second Edition 2005 (Spring)

TerraNova 3 2007 NP (Spring)								
Grade	TerraNova 2nd Edition 2000 Norms	Reading	Language	Mathematics	Reading Composite	Language Composite	Math Composite	Total
K	50	70	--	63	--	--	--	72
1	50	60	--	54	58	--	52	72
2	50	55	--	44	43	--	41	58
3	50	53	54	46	53	51	46	49
4	50	53	56	45	48	53	51	48
5	50	50	55	46	48	52	41	46
6	50	48	51	47	46	47	46	46
7	50	47	49	49	47	47	44	44
8	50	50	51	50	48	48	46	47
9	50	47	51	49	45	47	43	45
10	50	47	49	49	45	46	42	42
11	50	52	51	52	50	44	45	48
12	50	51	52	50	48	48	46	49

TerraNova 3 2007 NP (Spring)								
Grade	TerraNova 2nd Edition 2005 Norms	Reading	Language	Mathematics	Reading Composite	Language Composite	Math Composite	Total
K	50	71	--	63	--	--	--	74
1	50	61	--	56	58	--	52	72
2	50	55	--	43	49	--	41	58
3	50	51	54	49	51	51	49	49
4	50	53	55	47	49	50	44	47
5	50	49	55	48	48	50	44	46
6	50	48	51	50	47	50	49	46
7	50	46	48	49	47	47	45	44
8	50	49	50	50	48	49	47	46
9	50	48	51	49	46	47	43	45
10	50	48	50	49	45	45	42	45
11	50	52	51	52	50	44	44	47
12	50	50	52	50	48	46	46	48

Finally, another factor that will influence score change is the degree and impact of exposure of the previously administered *TerraNova* form. For example, when the same form is administered for several years, it is not uncommon to see a score drop when a new form is introduced. The particular content of the previous form might have had an influence on the curriculum and/or teaching practice, and this influence might not have the same effect on student performance when *TerraNova 3* is first administered.

Be aware that the score changes that may occur in response to the transition to *TerraNova, Third Edition* take place in the first year of implementation. It is wise to prepare teachers and parents by telling them that a slight change, either a drop or an increase, may occur. Using the conversion tables to compare students' performance on the new test to their performance on the prior test should put to rest any concerns.